

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 13.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-014701**Date Inspected:** 10-Jun-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 1000**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1830**Contractor:** Oregon Iron Works Clackamas, Or.**Location:** Clackamas, OR

CWI Name:	M. Gregson, J. Salazar, G. Mundt			CWI Present:	Yes	No
Inspected CWI report:	Yes	No	N/A	Rod Oven in Use:	Yes	No N/A
Electrode to specification:	Yes	No	N/A	Weld Procedures Followed:	Yes	No N/A
Qualified Welders:	Yes	No	N/A	Verified Joint Fit-up:	Yes	No N/A
Approved Drawings:	Yes	No	N/A	Approved WPS:	Yes	No N/A
				Delayed / Cancelled:	Yes	No N/A
Bridge No:	34-0006			Component:	Hinge K Pipe Beams	

Summary of Items Observed:

The Quality Assurance Inspector Sean Vance arrived on site at Oregon Iron Works, Inc (OIW) in Clackamas, OR, to randomly observe the in process welding of the Hinge K Pipe Beam assemblies. The QA Inspector arrived on site to randomly observe the OIW Quality Control (QC) Inspectors in process and completed visual and nondestructive testing. Upon the arrival of the QA Inspector the following observations were made:

Hinge-K Pipe Beam Assembly 101A-3:

The QA Inspector observed WID #S53 (Jerry Shepherd) currently in process of performing the submerged Arc Welding (SAW), on the Weld Joint #W4-01. The QA Inspector noted that this Complete Joint Penetration (AWS D1.5 B-U7-S), was the Fuse 120A-3 to Forging 102A-3 and that the SAW was being performed from the exterior of the weld joint in the flat position. The QA Inspector observed that continuous pre-heat was being applied utilizing 2 previously set up stationary rosebud torches, on the outside of the weld joint.

The QA Inspector verified that WID #S53 was currently qualified for this and randomly observed that WID #S53 had the applicable Welding Procedure Specification 4016, nearby the work area.

The QA Inspector observed that OIW QC Inspector Jose' Salazar was present, during this shift to monitor the welding activities being performed on the project. The QA Inspector spoke with QC Inspector Jose' Salazar and QC Inspector Salazar explained that he had previously recorded in process SAW parameters of 563 amps and 35 volts, during the SAW fill passes. QC Inspector Salazar explained that he had previously recorded a travel speed of 16.5 inches per minute. The QA Inspector noted that these welding parameters appeared to in compliance with the applicable WPS.

The QA Inspector later observed that the SAW had been completed and the assembly was currently idle, pending the 72 hrs. cooling time, prior to Ultrasonic Testing (UT). See attached pictures below.

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AG Machining (Boring, OR)

On this date, the QA Inspector arrived at AG Machine Works to witness the final machining, on this Fuse 120A-8. Upon arrival, the QA Inspector met with AG Machinist Terry Schmale and Mr. Schmale explained that the final machining on the Fuse was still in process. The QA Inspector observed that the Fuse was rotating in a horizontal lathe and a stationary cutting bit was removing the overlay material as the fuse rotated. Mr. Schmale explained that this was the third and final cut pass and will be completed on this date. Mr. Schmale explained that the finish honing with the Superfinisher will then be required to finish the Fuse surface to the required maximum of .08 um, per the contract requirements.

The QA Inspector had been previously notified by AG that no work will be performed on 6/11/10 and final machining will resume on 6/14/10.

Material, Equipment, and Labor Tracking (MELT)

QA Inspector Sean Vance performed a verification of material, personnel and equipment involved with the project. The QA Inspector observed at Oregon Iron Works Clackamas: 3 OIW production personnel and 2 QC Inspectors. The QA Inspector observed at AG Machine Works: 1 AG Machinist and 1 Supervisor.



Summary of Conversations:

As noted above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mohammad Fatemi (916) 813-3677, who represents the Office of Structural Materials for your project.

Inspected By:	Vance, Sean	Quality Assurance Inspector
Reviewed By:	Adame, Joe	QA Reviewer
